November 25, 2002

RE: Heartland Aluminum 069-16225-00060

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Heartland Aluminum
706 East Ninth Street
Warren, Indiana 46792

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F069-16225-00060	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 25, 2002 Expiration Date: November 25, 2007

Compliance Determination Requirements

D.1.16 Afterburners [63.1506(h)(2)]
D.1.17 Capture/Collection Systems [63.1506(c)(3)]
D.1.18 Monitoring Devices [63.1510(g)]
D.1.19 PM/PM10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
D.1.20 Additional Equation for Determining Compliance [63.1513(d)]
D.1.21 Performance Evaluation [63.1512(m)], [326 IAC 2-8-5(a)(1), (4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.22 Afterburners [63.1510(g)(3)]
D.1.23 Capture/Collection System [63.1510(d)(2)]
D.1.24 Monitoring Devices [63.1510(g)]
D.1.25 Visible Emissions Notations
D.1.26 Alternate Monitoring Methods [63.1510(w)]

Notification, Record Keeping, and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.27 Notifications [63.1515], [63.1512(s)]

Record Keeping Requirements

D.1.28 Record Keeping for 40 CFR 63, Subpart RRR [63.1517]
D.1.29 Particulate Matter (PM) and PM10 Record Keeping Requirements

Reporting Requirements

D.1.30 Reporting Requirements for 40 CFR 63, Subpart RRR [63.1516(b)]

Certification
Emergency Occurrence Form
Quarterly Deviation and Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a secondary metals reclamation operation.

Authorized individual:	Michael Haggerty
Source Address:	706 East Ninth Street, Warren, Indiana 46792
Mailing Address:	P.O. Box 150, Warren, Indiana 46792
SIC Code:	5093
Source Location Status:	Huntington
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) aluminum sweat furnace identified as AS-1000 with a maximum capacity of 0.70 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 2.0 million (MM) British thermal units (Btu) per hour total; a secondary molten metal holding chamber utilizing a natural gas fired burner rated at 1.0 MMBtu per hour; and a 0.4 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-01.

(b) One (1) aluminum sweat furnace identified as AS-990 with a maximum capacity of 1.25 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 5.0 million (MM) British thermal units (BTU) per hour total, and a 1.0 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-02.

A.3 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain an Preventive Maintenance Plan (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exist independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ , may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard

Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)].

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8, the PM10 potential to emit shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

In addition, the owner or operator shall, for any change or modification which may increase the source emissions of any other criteria pollutant to greater than or equal to 100 tons/yr, any single HAP to greater than or equal to 10 tons/yr, and/or combined HAPs to greater than or equal 25 tons/yr, submit a Title V application to the Office of Air Quality for approval before such change may occur.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is/are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 State General Performance Testing Requirements [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ no later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

C.10 40 CFR 63, Subpart RRR General Performance Testing Requirements [63.1511]

The owner or operator shall comply with the following testing requirements:

(a) Prior to conducting the performance tests required in Conditions D.1.22, D.1.23, and D.1.25, the owner or operator shall prepare and submit notification of intent to conduct a performance test and a site-specific test plan meeting the requirements of 40 CFR 63.7(c). Said test protocol shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

at least sixty (60) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) Following approval of the site-specific test plan, the owner or operator shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source emission unit as follows, and report the results in the notification of compliance status report described in Condition D.1.34(b).

(1) The owner or operator shall conduct each performance test according to the requirements of the general provisions of Subpart A of Part 63 and this Subpart.

(2) The owner or operator shall conduct each test while the respective sweat furnace is operating at the highest production level with charge materials representative of the range of materials processed by the unit, and if applicable, at the highest reactive fluxing rate.

(3) Each performance test for a batch process shall consist of three (3) separate runs, with pollutant sampling for each run being conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of three (3) hours.

(4) Each performance test for a batch process shall consist of three (3) separate runs, with the pollutant sampling for each run being conducted over the entire process operating cycle.

(5) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run shall be conducted for a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(6) Initial compliance with an applicable emission limit or standard shall be considered demonstrated if the average of the required three (3) runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) The owner or operator shall use the following test methods found in 40 CFR 60, Appendix A, as applicable, to determine compliance with the applicable emission limits or standards:

(1) Method 1 for sample and velocity traverses,
(2) Method 2 for velocity and volumetric flow rate,
(3) Method 3 for gas analysis,
(4) Method 4 for moisture content of gas,
(5) Method 5 for concentration of PM,
(6) Method 9 for visible emission observations,
(7) Method 23 for the concentration of dioxins/furans,
(8) Method 25A for the concentration of THC, and
(9) Method 26A for the concentration of HCl.

The owner or operator may use an alternative test methods in lieu of the test methods specified in this Condition provided that said test method(s) is/are approved by the Office of Air Quality.

(d) The owner or operator shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 63.1510, that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator shall use the appropriate procedures in this Condition and submit the information in the notification of compliance status report as specified in Condition D.1.34(b).

(e) The owner or operator may use existing data in addition to the test results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Office of Air Quality:

(1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.
(2) The same test methods and procedures as required by this Subpart were used in the test.
(3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
(4) All process and control equipment operating parameters required to be monitored were monitored as required in this Subpart and documented in the test report.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation).

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.18 Compliance Response Plan - Preparation, Implementation, Records and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B - Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required by Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does/do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

(a) One (1) aluminum sweat furnace identified as AS-1000 with a maximum capacity of 0.70 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 2.0 million (MM) British thermal units (Btu) per hour total; a secondary molten metal holding chamber utilizing a natural gas fired burner rated at 1.0 MMBtu per hour; and a 0.4 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-01.

(b) One (1) aluminum sweat furnace identified as AS-990 with a maximum capacity of 1.25 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 5.0 million (MM) British thermal units (BTU) per hour total, and a 1.0 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-02.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

General Construction Conditions

D.1.1 General Construction Condition

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2 Effective Date of Permit

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3 Construction Condition Applicability

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.4 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A)]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the sweat furnaces AS-990 and AS-1000, except as otherwise specified in 40 CFR 63, Subpart RRR.

D.1.5 Particulate Matter (PM) Emission Limitations [326 IAC 6-3-2]

The allowable PM emission rate from sweat furnaces AS-990 and AS-1000 shall not exceed 4.76 and 3.23 pounds per hour, respectively.

D.1.6 PM10 Emission Limitations [326 IAC 2-1.1-11]

The allowable PM10 emission rate from sweat furnaces AS-990 and AS-1000 shall not exceed 4.76 and 3.23 pounds per hour, respectively.

D.1.7 Sweat Furnace Dioxin/Furan Emission Limitations [63.1505(f)(2)]

The owner or operator shall not discharge or cause to be discharged to the atmosphere, dioxin/furan emissions from sweat furnaces AS-990 or AS-1000, in excess of 3.5×10^{-10} gr/dscf TEQ at eleven percent (11%) oxygen (O_2).

D.1.8 Sweat Furnace Operation [63.1506(a) and (h)], [326 IAC 2-1.1-11], [326 IAC 6-3-2]

The owner or operator shall operate sweat furnaces AS-990 and AS-1000 and their associated control equipment according to the requirements of Subpart RRR and this permit upon startup.

D.1.9 Afterburners [63.1505(f)(1)], [63.1512(f)], [63.1506(h)(1)], [326 IAC 2-1.1-11], [326 IAC 6-3-2]

The owner or operator shall design, install, operate and maintain afterburners at sweat furnaces AS-990 and AS-1000. Said afterburners shall be maintained such that the 3-hour block average operating temperature of each afterburner is at 1600 degrees Fahrenheit (°F) or greater and the residence time is two seconds or greater.

Satisfying the requirements of this Condition shall be considered sufficient to demonstrate compliance with the sweat furnace dioxin/furan emission limits of Condition D.1.7. Thus, no initial or subsequent performance tests for the dioxin/furan limits of Condition D.1.7 shall be required.

D.1.10 Capture/Collection Systems [63.1510(d)(1)], [63.1506(c)(1),(2)] [326 IAC 2-1.1-11], [326 IAC 6-3-2]

The owner or operator shall design, install, operate, and maintain at sweat furnaces AS-990 and AS-1000, a system for the capture and collection of particulate matter, PM10, and dioxin/furan emissions. Said capture/collection systems shall:

(a) meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice";

(b) vent captured emissions through a closed system; and

(c) be maintained such that each capture/control system operates at the parameter levels established in the required stack tests of Condition D.1.19 that achieves compliance with the PM limits of Condition D.1.5 and PM10 limits of Condition D.1.6.

D.1.11 Afterburner Temperature Monitoring Devices [63.1510(g)(1), (2)]

The owner or operator shall install an afterburner temperature continuous monitoring device at the exit of each afterburner’s combustion zone. Said temperature monitoring devices shall have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in Condition D.1.21, and shall be:

(a) designed, installed, and calibrated according to the manufacturer’s specifications;

(b) maintained according to the manufacturer’s instructions for short and long term maintenance, with each monitoring device operating parameter value or range being the value or range established during the performance evaluation required in Condition D.1.21; and

(c) operated and maintained such that each monitoring system records the temperature in 15 minute block averages and determines and records the average temperature for each 3 hour block period;

with the reference method being a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

The owner or operator shall also meet all other applicable continuous monitoring system requirements of 40 CFR 63, Subpart A.

D.1.12 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

D.1.13 Operation, Maintenance, and Monitoring Plan [63.1510(b)], [326 IAC 2-1.1-11]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, prepare and implement a written operation, maintenance, and monitoring (OM&M) plan.

Said OM&M plan shall be implemented at startup, but need only be submitted to the Office of Air Quality (OAQ) for review and approval as part of the Part 70 or Part 71 permit application required to be submitted by December 9, 2005. Said OM&M plan shall include, at a minimum, the following information:

(a) for each process and control device, the operating parameters to be monitored to determine compliance, and any applicable established operating levels or ranges;

(b) a monitoring schedule for each sweat furnace;

(c) a list of the procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits of Conditions D.1.5, D.1.6, and D.1.7;

(d) a list of the procedures for the proper operation and maintenance of the monitoring devices or systems used to determine compliance, including:

(1) the procedures for calibration and certification of accuracy of each monitoring device, at least once every 6 months, or according to the manufacturer's instructions; and

(2) the procedures for the quality control and quality assurance of the required continuous emission monitoring system(s) as required by the general provisions in 40 CFR 63, Subpart A;

(e) a list of the procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used to determine feed/charge (or throughput) weight if a measurement device is not used;

(f) a list of the corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in Part (a) of this Condition, including:

(1) the procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and

(2) the procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; and

(g) a maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

All subsequent proposed changes to the plan shall be submitted to the Office of Air Quality (OAQ) for review and approval, and shall include, at a minimum, the most recent updated information requested in (a) through (g) of this condition. Pending approval by the OAQ of an initial or amended plan, the owner or operator shall comply with the provisions of the most recent existing approved plan.

D.1.14 Startup, Shutdown, and Malfunction (SSM) Plan [63.1516(a)]

The owner or operator shall develop and implement a written Startup, Shutdown, and Malfunction plan as described in Sec. 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard.

In addition to the information required in 63.6(e)(3), the plan shall include:

(a) procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

(b) corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

The SSM plan shall be included as part of the OM&M plan required in Condition D.1.13.

D.1.15 Corrective Action for 40 CFR 63, Subpart RRR [63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action.

The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

Compliance Determination Requirements

D.1.16 Afterburners [63.1506(h)(2)]

The owner or operator shall operate the afterburners of sweat furnaces AS-990 and AS-1000 at all times the respective sweat furnaces are in operation, in accordance with the OM&M plan.

D.1.17 Capture/Collection Systems [63.1506(c)(3)]

The owner or operator shall operate the capture/control systems at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

D.1.18 Monitoring Devices [63.1510(g)]

The owner or operator shall operate the monitoring devices at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

D.1.19 PM/PM10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

During the period between 60 and 180 days after issuance of this permit, in order to determine compliance with Conditions C.1, D.1.5, and D.1.6, the owner or operator shall perform PM and PM-10 testing utilizing methods as approved by the Office of Air Quality. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.20 Additional Equation for Determining Compliance [63.1513(d)]

The owner or operator shall use the following equation, as applicable, to determine compliance with the limit of Condition D.1.7.

For conversion of gr/dscf or lb/ton to gr TEQ/dscf or lb TEQ/ton, respectively, the owner or operator shall use the procedures and equation in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB-145756.

D.1.21 Performance Evaluation [63.1512(m)], [326 IAC 2-8-5(a)(1), (4)]

Prior to the initial performance test, the owner or operator shall:

(a) conduct a performance evaluation for each temperature monitoring device according to the requirements of 63.8; and

(b) use the following procedures to establish an operating parameter value or range for the required afterburner operating temperature:

(1) continuously measure and record the operating temperature of each afterburner every fifteen (15) minutes during the THC and D/F performance tests,

(2) determine and record the fifteen (15) minute block average temperatures for the three test runs, and

(3) determine and record the 3-hour block average temperature measurements for the 3 test runs.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.22 Afterburners [63.1510(g)(3)]

The owner or operator shall, for the afterburners of sweat furnaces AS-990 and AS-1000, conduct an inspection of each afterburner at least once a year and record the results, with each inspection including, at a minimum:

(a) inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

(b) inspection for proper adjustment of combustion air;

(c) inspection of internal structures (e.g., baffles) to ensure structural integrity;

(d) inspection of dampers, fans, and blowers for proper operation;

(e) inspection for proper sealing;

(f) inspection of motors for proper operation;

(g) inspection of combustion chamber refractory lining and clean and replace lining as necessary;

(h) inspection of afterburner shell for corrosion and/or hot spots;

(i) documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made; and

(j) verification that the equipment is maintained in good operating condition.

Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

D.1.23 Capture/Collection System [63.1510(d)(2)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Conditions D.1.10 and D.1.17, and record the results of each inspection.

D.1.24 Monitoring Devices [63.1510(g)]

The owner or operator shall:

(a) continuously monitor and record the operating afterburner temperature of each respective afterburner in 15 minute block averages and determine and record the average temperature for each 3 hour block period; and

(b) calibrate each afterburner monitoring device, as necessary, according to the manufacturer's specifications referenced in Condition D.1.11(a).

D.1.25 Visible Emissions Notations

(a) Daily visible emission notations of sweat furnaces AS-990 and AS-1000 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.26 Alternate Monitoring Methods [63.1510(w)]

(a) The owner or operator may, for sweat furnaces AS-990 and AS-1000, submit to the United States (U.S.) Environmental Protection Agency (EPA), Region V, an application for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart RRR, provided the owner or operator:

(1) continues to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure,

(2) submits an application for approval of alternate monitoring methods no later than the notification of the performance test, with said application containing:

(A) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach,

(B) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated, and

(C) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s), and

(3) submits all required supporting information in a timely manner to the U.S. EPA, Region V, to allow sufficient consideration of the application. Neither submittal of an application nor the U.S. EPA, Region V's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of Subpart RRR.

(b) Upon receipt of the alternative monitoring plan application, the U.S. EPA, Region V, shall review the alternate monitoring application as follows:

(1) No averaging periods other than those specified in Section 63.1510 shall be approved.

(2) The alternate monitoring application shall only be approved if it is determined that the alternate monitoring plan provides equivalent or better assurance of compliance with the relevant emission standard(s).

(3) Before disapproving any alternate monitoring application, the U.S. EPA, Region V, shall provide notice of:

(A) the information and findings upon which the intended disapproval is based, and

(B) an opportunity for the owner or operator to present additional supporting information before final action is taken on the application. Said notice shall specify how much additional time is allowed for the owner or operator to provide additional supporting information.

The U.S. EPA, Region V, reserves the authority to, at any time on a case-by-case basis, require additional or alternative operating limits, or alternative approaches to establishing operating limits, as deemed necessary to ensure that compliance with the emission standards of this subpart is demonstrated.

Notification, Record Keeping, and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.27 Notifications [63.1515], [63.1512(s)]

The owner or operator shall submit the following notifications:

(a) Initial Notifications:

The owner or operator shall submit initial notifications to the Office of Air Quality as follows:

(1) As required by 63.9(b)(1), the owner or operator shall notify the Office of Air Quality of any existing minor source that is modified such that it becomes a major source subject to Subpart RRR.

(2) As required by 63.9(b)(3), the owner or operator shall notify the Office of Air Quality of any new minor affected source, reconstructed affected source, or source that has been reconstructed such that it becomes an affected source for which an application for approval of construction or reconstruction is not required under 63.5(d), must provide notification include a statement that the source is subject to any standard under Subpart RRR.

(3) As required by 63.9(b)(4), the owner or operator shall, for any new major affected source or reconstructed major affected source for which an application for approval of construction or reconstruction is required by 63.5(d) must, provide the following notifications:

(A) notification of intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source,

(B) notification of the date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction was commenced before the effective date of Subpart RRR, or no later than 30 days after the date construction or reconstruction commenced),

(C) notification of the anticipated date of startup, and

(D) notification of the actual date of startup.

(4) As required by 63.9(b)(5), any owner or operator who intends to construct a new affected source or reconstruct an affected source subject to Subpart RRR, or reconstruct a source such that it becomes an affected source subject to Subpart RRR, shall provide notification of the intended construction or reconstruction. Said notification shall include all the information required for an application for approval of construction or reconstruction, as required by 63.5(d).

For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

Said application shall be submitted as follows:

(A) the application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence, but no sooner than the effective date of Subpart RRR if the construction or reconstruction commences after the effective date of Subpart RRR, or

(B) the application shall be submitted as soon as practicable before startup but no later than 90 days after the effective date of Subpart RRR if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

(5) As required by 63.9(d), the owner or operator shall provide notification of any special compliance obligations for a new source.

(6) As required by 63.9(e) and (f), the owner or operator shall, if required, provide notification to the Office of Air Quality, of the anticipated date for conducting performance tests and visible emission observations. Notification of the intent to conduct a performance test shall be submitted at least 60 days before the performance test is scheduled. Notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

(7) As required by 63.9(g), the owner or operator shall provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) Notification of Compliance Status Report:

The owner or operator shall submit a notification of compliance status report to the Office of Air Quality and US EPA, Region V within 60 days of startup. Said notification of compliance status report shall include the information specified in this Condition, and shall be signed by the responsible official who shall certify its accuracy.
The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination.

For the notification of compliance status report to be deemed complete, the owner or operator shall submit the following information:

(1) the approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

(2) the compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(3) design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in Conditions D.1.10 and D.1.17.

(4) manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 ^{o}F for the afterburners of sweat furnaces AS-990 and AS-1000.

(5) approved OM&M plan.

(6) startup, shutdown, and malfunction plan, with revisions.

If the information specified in (b)(1) through (b)(6) above is submitted at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted.

Record Keeping Requirements

D.1.28 Record Keeping for 40 CFR 63, Subpart RRR [63.1517]

The owner or operator shall keep records as follows:

(a) As required by Sec. 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.

(1) The owner or operator shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records shall be retained at the facility. The remaining 3 years of records may be retained off site,

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche, and

(3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

(b) In addition to the general records required by Sec. 63.10(b), the owner or operator shall maintain records of:

(1) For sweat furnace AS-990 and AS-1000 afterburners:

(A) Records of the 15-minute block average afterburner operating temperature recorded in Condition D.1.24(a), including any period when the temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken, and

(B) Records of results of the annual afterburner inspections required in Condition D.1.22.

(2) For each continuous monitoring system, records required by Sec. 63.10(c).

(3) Records of annual inspections of emission capture/collection and closed vent systems.

(4) Records for any approved alternative monitoring or test procedure.

(5) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(A) Startup, shutdown, and malfunction plan as specified in 63.10(b), and

(B) For major sources, the OM&M plan.

D.1.29 Particulate Matter (PM) and PM10 Record Keeping Requirements

(a) To document compliance with Condition D.1.25, the owner or operator shall maintain records of daily visible emission notations of the AS-990 and AS1000 stack exhaust.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

Reporting Requirements

D.1.30 Reporting Requirements for 40 CFR 63, Subpart RRR [63.1516(b)]

The owner or operator shall submit the following reports:

(a) Excess Emissions/Summary Report:

As required by Sec. 63.10(e)(3), the owner or operator shall submit semiannual reports within 60 days after the end of each 6-month period. Each report shall contain the information specified in Sec. 63.10(c). When no deviations of parameters have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period.

A report shall be submitted if any of these conditions occur during a 6-month reporting period:

(1) an excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter),

(2) an action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in Sec. 63.6(e)(3), and

(3) any period of time when sweat furnace AS-990 or AS-1000 was not operated according to the requirements of 40 CFR 63, Subpart RRR.

(b) Annual Compliance Certifications:

For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator shall certify continuing compliance based upon, but not limited to, the following conditions:

(1) Any period of excess emissions, as defined in (a) of this Condition, that occurred during the year were reported as required by Subpart RRR, and

(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Heartland Aluminum
Source Address: 706 East Ninth Street, Warren, Indiana 46792
Mailing Address: P.O. Box 150, Warren, Indiana 46792
FESOP No.: 069-16225-00060

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Heartland Aluminum
Source Address: 706 East Ninth Street, Warren, Indiana 46792
Mailing Address: P. O. Box 150, Warren, Indiana 46792
FESOP No.: 069-16225-00060

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Heartland Aluminum
Source Address: 706 East Ninth Street, Warren, Indiana 46792
Mailing Address: P. O. Box 150, Warren, Indiana 46792
FESOP No.: 069-16225-00060

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: ______________________________

Title/Position: ______________________________

Date: ______________________________

Phone: ______________________________

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Federally Enforceable State Operating Permit

Source Name:	Heartland Aluminum
Source Location:	706 East Ninth Street, Warren, Indiana 46792
County:	Huntington
SIC Code:	5093
Operation Permit No.:	F 069-16225-00060
Permit Reviewer:	SDF

On August 8, 2002, the Office of Air Quality (OAQ) had a notice published in the Herald Press, located in Huntington, Indiana, stating that Heartland Aluminum had applied for a construction permit to construct and operate a secondary metals reclamation operation. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

After further review, the IDEM, OAQ has determined that the following additional changes need to be made.

1. Change 1:

Condition C.1 establishes an annual PM10 limit to restrict the emissions to less than the Part 70 level of 100 tons per year. In order to make this limit federally enforceable as a practical matter, compliance with this limit must be demonstrated.

To demonstrate compliance with the limit of Condition C.1, the owner or operator must conduct performance testing.

Conducting performance tests requires a short term limit. The existing permit does not include a short term PM10 limit. Thus, an hourly PM10 limit shall be established. This limit shall be established pursuant to 326 IAC 2-8-4(1) which states emission limits shall be established to limit all applicable pollutant emissions to less than their respective Part 70 applicable levels.

To determine the short term hourly PM10 limits, the following calculations shall be performed.

AS-990:

The following calculations determine the annual allowable PM10 emissions for sweat furnace AS-990 based on the total allowable rate of 99 tons per year and an estimated AS990 emission fraction of 0.60.

99 tons/yr * 0.60 = 59.4 tons/yr

The following calculations determine the hourly allowable rate for sweat furnace AS-990.

59.4 tons/yr * 1/8760 yr/hr * 2000 lb/ton = 13.56 lb PM10/hr

AS-1000:

The following calculations determine the annual allowable PM10 emissions for sweat furnace AS-1000 based on the total allowable rate of 99 tons per year and an estimated AS1000 emission fraction of 0.40.

99 tons/yr * 0.40 = 39.60 tons/yr

The following calculations determine the hourly allowable rate for sweat furnace AS1000.

39.6 tons/yr * 1/8760 yr/hr * 2000 lb/ton = 9.04 lb PM10/hr

However, since the PM10 limits exceed the PM limits related to 326 IAC 6-3, it is determined that the 326 IAC 6-3 limits become the limiting factors when determining the appropriate PM10 limit. Therefore, the PM10 limits established will be the same as the 326 IAC 6-3 PM limits.

To incorporate the PM10 limits into the permit, the following changes to the permit shall be made.

(a) New Condition D.1.6 shall be added as follows to establish short term PM10 limits. These limits will provide the emission levels that will be used during the stack tests to demonstrate that compliance with the respective limits is achieved.

D.1.6 PM10 Emission Limitations [326 IAC 2-1.1-11]
The allowable PM10 emission rate from sweat furnaces AS-990 and AS-1000 shall not exceed 4.76 and 3.23 pounds per hour, respectively.

(b) 40 CFR 63, Subpart RRR requires the owner or operator to operate all affected units and control and monitoring devices according to the requirements of the subpart. This requirement is reflected in existing Condition D.1.9. Existing Condition D.1.9 (now Condition D.1.8) also requires the owner or operator to operate the affected units and control and monitoring devices according to all other requirements of the permit.

Thus, the header of existing Condition D.1.9 (now Condition D.1.8) shall include references to all applicable requirements in Section D.1 (326 IAC 6-3-2 and 326 IAC 2-1.1-11), not just Subpart RRR.

No changes to the condition are required because Condition D.1.9 (now Condition D.1.8) already requires the owner or operator to operate the sweat furnaces and their associated control devices according to Subpart RRR and the requirements of the permit (which includes the new PM10 requirements).

D.1.~~9~~**8** Sweat Furnace Operation [40 CFR 63.1506(a), Subpart RRR]**, [326 IAC 2-1.1-11], [326 IAC 6-3-2]**
The owner or operator shall operate sweat furnaces AS-990 and AS-1000 and their associated control equipment according to the requirements of Subpart RRR and this permit upon startup.

(c) The afterburner operating requirements of Condition D.1.10 (now Condition D.1.9) shall be amended as follows to include the 326 IAC 2-1.1-11 and 326 IAC 6-3-2 references and ensure that the operating temperature and residence time are maintained at levels that achieve compliance with all limits in the permit, not just the Subpart RRR requirements.

D.1.~~10~~**9** Afterburners [40 CFR 63.1506(h), Subpart RRR]**, [326 IAC 2-1.1-11], [326 IAC 6-3-2]**
The owner or operator shall design, install, operate and maintain afterburners at sweat furnaces AS-990 and AS-1000. Said afterburners shall be maintained such that the operating temperature **and residence time** of each afterburner is at ~~or above~~ 1600 degrees Fahrenheit (ºF)~~,~~ and ~~the minimum design residence time is no less than~~ two seconds**, respectively, or a greater operating temperature and residence time that achieves compliance with all requirements of this permit**.

Satisfying the requirements of this Condition shall be considered sufficient to demonstrate compliance with the sweat furnace dioxin/furan emission limits of Condition D.1.~~6~~**7**. Thus, no compliance tests for the dioxin/furan limits of Condition D.1.~~6~~**7** shall be required.

(d) The capture/collection system requirements of existing Condition D.1.11 (now Condition D.1.10) shall be amended as follows to include the 326 IAC 2-1.1-11 and 326 IAC 6-3-2 references and ensure that the capture systems operate at the levels that achieve compliance with the PM10 limits of new Condition D.1.6 as well as the other limits already listed.

D.1.1~~1~~**0** Capture/Collection Systems [40 CFR 63.1510(d), Subpart RRR] [40 CFR 63.1506(c), Subpart RRR]**, [326 IAC 2-1.1-11], [326 IAC 6-3-2]**
The owner or operator shall design, install, operate, and maintain at sweat furnaces AS-990 and AS-1000, a system for the capture and collection of particulate matter, PM10, and dioxin/furan emissions. Said capture/collection systems shall:

(a) meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of ``Industrial Ventilation: A Manual of Recommended Practice'';

(b) vent captured emissions through a closed system; and

(c) be maintained such that each capture/control system operates at the parameter levels established in the required stack tests of Conditions D.1.21 and D.1.22 that achieve compliance with the PM limits of Condition D.1.5**, PM10 limits of Condition D.1.6,** and dioxin/furan limits of Conditions ~~D.1.6,~~ D.1.7, ~~and~~ D.1.8**, and D.1.9**.

(e) Condition D.1.21 (now Condition D.1.19) shall be amended to include the new PM10 limits established in new Condition D.1.6.

D.1.~~2~~1**9** PM/PM10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
During the period between 60 and 180 days after issuance of this permit, in order to demonstrate compliance with Conditions C.1**,** ~~and~~ D.1.5, **and D.1.6,** the owner or operator shall perform PM and PM-10 testing utilizing methods as approved by the Office of Air Quality. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

2. Change 2:

Upon review of the applicable requirements of Subpart RRR and the conditions of the original permit, it was first determined that the requirements are correct due to the definitions established in the rule.

After the public comment period, the OAQ submitted comments again questioning the status of the sweat furnaces. After contacting the EPA, Region V, the OAQ received a determination via E-mail stating that sweat furnaces are not Group 1 Furnaces and thus, not SAPUs. Region V determined the following:

"A sweat furnace does not qualify as a Group 1 furnace. A sweat furnace is defined in the definitions section of the rule as a specific entity that processes aluminum containing significant quantities of iron. The definition of Group 1 is that it process holds aluminum but makes no mention of the iron content of a feedstock, this difference is critical and established these pieces of equipment as being separate and distinct. In short, the definition of a specific entity precludes it from being considered a group 1 furnace and it is only subject to sweat furnace requirements."

Based on this interpretation, it is determined that the sweat furnaces are not Group 1 furnaces or SAPUs.

Thus, the following changes to the permit have been made to eliminate all requirements associated with Group1 furnaces and SAPUs. Several additional changes have been made to consolidate like information, clarify what is required, and place the requirements in the appropriate divisions within Section D.1. Deleted information is struck-out and additional language is indicated in bold type.

1. Condition D.1.7:

The rule citation of Condition D.1.7 has been amended as follows to reflect the specific rule reference.

D.1.7 Sweat Furnace Dioxin/Furan Emission Limitations [63.1505(f)**(2)**]
The owner or operator shall not discharge or cause to be discharged to the atmosphere, dioxin/furan emissions from sweat furnaces AS-990 or AS-1000, in excess of 3.5×10^{-10} gr/dscf TEQ at eleven percent (11%) oxygen (O_2).

2. Condition D.1.8:

Condition D.1.8 was amended to allow the limit to be based on a lb/ton feed/charge or lb/ton of aluminum produced and to reflect the specific group 1 furnace limit rule citation.

However, after the public comment period, it was determined that the sweat furnaces are no longer considered Group 1 furnaces and that this limit is no longer applicable. Therefore, Condition D.1.8 shall be removed.

~~D.1.8 Group 1 Furnace Individual Dioxin/Furan Content Limitations [63.1505(i)**(3)**]~~
~~The owner or operator shall not allow the dioxin/furan content of the feed/charge or aluminum processed at sweat furnaces AS-990 or AS-1000 to exceed 2.1 E-4 grains (3.0 E-8 pound) TEQ per ton of feed/charge (or ton of aluminum produced).~~

3. Condition D.1.9:

Condition D.1.9 was amended to:

(a) state that the limit can be based on a lb/ton feed/charge or lb/ton of aluminum produced,
(b) reflect the specific rule citation for the SAPU limit,

(c) ensure that there is no doubt that demonstrating the compliance with the group 1 limits can also demonstrate compliance with the SAPU limits (making SAPU performance tests not necessary), and
(d) add the rule citation that allows the results of the group 1 compliance demonstration to demonstrate compliance with the SAPU limits.

However, after the public comment period, it was determined that the sweat furnaces are no longer considered SAPUs and that this limit is no longer applicable. Therefore, Condition D.1.9 shall be removed.

~~D.1.9 Secondary Aluminum Processing Unit Dioxin/Furan Content Limitations [63.1505(k)(3)], [63.1505(k)(5)]~~
~~The owner or operator shall, on and after the date of approval of the operation, maintenance, and monitoring (OM&M) plan, limit the combined 3-day, 24-hour rolling average dioxin/furan emissions from sweat furnaces AS-990 and AS-1000 to 3.0 E-8 pound dioxin/furan TEQ per ton of feed/charge (or ton of aluminum produced).~~

~~Demonstrating compliance with the requirements of Condition D.1.8 shall be considered sufficient to demonstrate compliance with the SAPU dioxin/furan emission limits of this Condition. Thus, no initial or subsequent performance tests for the dioxin/furan limits of this Condition shall be required.~~

4. Condition D.1.11:

Condition D.1.11(now Condition D.1.9) shall be changed as follows to include:

(a) the rule citation that allows the owner or operator to operate afterburners instead of conducting performance tests to meet the requirements of 63.1505(f)(1),
(b) the rule citation that specifies an operating temperature based on a 3-hour block average,
(c) the requirement to base the operating temperature on a 3-hour block average basis, and
(d) because performance tests are no longer required, revised language that requires the owner or operator to achieve the operating parameters specified in 63.1505(f)(1) and 63.1506(h)(1), not the operating parameters established in 63.1505(f)(1), 63.1506(h)(1), or the performance tests.

D.1.~~11~~**9** Afterburners **[63.1505(f)(1)], [63.1512(f)],** [63.1506(h)**(1)**], [326 IAC 2-1.1-11], [326 IAC 6-3-2]
The owner or operator shall design, install, operate and maintain afterburners at sweat furnaces AS-990 and AS-1000. Said afterburners shall be maintained such that the **3-hour block average** operating temperature ~~and residence time~~ of each afterburner is at 1600 degrees Fahrenheit (°F) **or greater** and **the residence time is** two seconds or greater~~, respectively, or a greater operating temperature and residence time that achieves compliance with all requirements of this permit~~. Satisfying the requirements of this Condition shall be considered sufficient to demonstrate compliance with the sweat furnace dioxin/furan emission limits of Condition D.1.7. Thus, no **initial or subsequent** ~~compliance~~ **performance** tests for the dioxin/furan limits of Condition D.1.7 shall be required.

5. Condition D.1.12:

Condition D.1.12 (now Condition D.1.10) shall be changed as follows to:

(a) reflect the specific rule citations for the capture/collection systems; and

(b) because performance tests are no longer required, remove the dioxin/furan performance test references.

D.1.~~12~~**10** Capture/Collection Systems [63.1510(d)**(1)**], [63.1506(c)**(1),(2)**] [326 IAC 2-1.1-11], [326 IAC 6-3-2]
The owner or operator shall design, install, operate, and maintain at sweat furnaces AS-990 and AS-1000, a system for the capture and collection of particulate matter, PM10, and dioxin/furan emissions. Said capture/collection systems shall:

(a) meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of ``Industrial Ventilation: A Manual of Recommended Practice'';

(b) vent captured emissions through a closed system; and

(c) be maintained such that each capture/control system operates at the parameter levels established in the required stack tests of Condition~~s~~ D.1.~~23~~**19** ~~and D.1.24~~ that achieve**s** compliance with the PM limits of Condition D.1.5~~,~~ **and** PM10 limits of Condition D.1.6~~, and dioxin/furan limits of Conditions D.1.7, D.1.8, and D.1.9~~.

6. Condition D.1.13:

Condition D.1.13 (now Condition D.1.11) shall be changed as follows to:

(a) reflect the specific rule citations for the afterburner temperature monitoring devices,
(b) ensure that there is no doubt that the monitors required are continuous monitors, and
(c) include the additional monitor operating requirements and reference specified in 63.1510(g).

D.1.~~13~~**11** Afterburner Temperature Monitoring Devices [63.1510(g)**(1), (2)**]
The owner or operator shall install an afterburner temperature **continuous** monitoring device at the exit of each afterburner's combustion zone. Said temperature monitoring devices shall have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in Condition D.1.2~~7~~**1**, and shall be:

(a) designed, installed, and calibrated according to the manufacturer's specifications; ~~and~~

(b) maintained according to the manufacturer's instructions for short and long term maintenance, with each monitoring device operating parameter value or range being the value or range established during the performance evaluation required in Condition D.1.2~~7~~**1; and**

(c) operated and maintained such that each monitoring system records the temperature in 15 minute block averages and determines and records the average temperature for each 3 hour block period;

with the reference method being a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

The owner or operator shall also meet all other applicable continuous monitoring system requirements of 40 CFR 63, Subpart A.

7. Condition D.1.14:

Condition D.1.14 was amended to reflect the verbatim Subpart RRR language pertaining to the performance test operating cycle or time period, to ensure that the "monitors" achieve the accuracy required in Part (A)(1), not the owner or operator, to more succinctly describe the alternative feed/charge - aluminum production monitoring requirements, and to change the specific aluminum production requirements of the condition (the last paragraph) to be more consistent with the language of Subpart RRR.

However, after the public comment period, it was determined that the sweat furnaces are no longer considered Group1 furnaces or SAPUs. Thus, the Group 1 and SAPU limits were removed. Removing the Group 1 and SAPU limits removed all lb/ton limits.

Pursuant to 63.1506(d), the feed/charge requirements only apply to each source or affected unit subject to a lb/ton limit. Since there are no remaining lb/ton limits, it is determined that the feed/charge requirements no longer apply. Therefore, the feed/charge requirements of Condition D.1.14 shall be removed.

~~D.1.14 Feed/Charge Monitoring Requirements [63.1506(d)], [63.1510(e)]~~
~~The owner or operator shall, for sweat furnaces AS-990 and AS-1000, either:~~

~~(a) install, calibrate, operate, and maintain a device that measures and records or otherwise determines, the total weight of feed/charge to, or if applicable, the total aluminum production weight from, sweat furnaces AS-990 and AS-1000 for the same operating cycle or time period used in the performance test, with the feed/charge or aluminum production from within the SAPU being measured or recorded on an emission unit by emission unit basis. In addition shall, for each device:~~

~~(1) achieve a minimum weight measurement device or procedure accuracy of +- 1 percent of the weight being measured. If the required accuracy cannot be achieved as a result of equipment layout or charging practices, the owner or operator may apply to the Office of Air Quality for approval to use a device of alternative accuracy. Said device of alternative accuracy shall not be approved unless the owner or operator provides assurance through data and information that the affected unit will meet the relevant standard,~~
~~(2) verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six months, and~~
~~(3) follow the weight measurement system or other weight determination procedures specified in the OM&M plan.~~

~~or~~

~~(b) use an alternative procedure to determine the total weight of feed/charge or aluminum production from sweat furnaces AS-990 and AS-1000 provided said alternative procedure is deemed acceptable by the Office of Air Quality.~~

~~If the owner or operator measures and records the aluminum production weight from sweat furnaces AS-990 and AS-1000 instead of the feed/charge weight, the owner or operator shall measure and record the aluminum production weight for all emission units within the SAPU, and base all calculations used to demonstrate compliance with the emission limits for the SAPU on aluminum production weight rather than feed/charge weight.~~

8. Condition D.1.15:

Condition D.1.15 was changed to reflect the specific rule citations pertaining to the labeling requirements.

However, after the public comment period, it was determined that the sweat furnaces are no longer considered Group 1 furnaces.

Pursuant to 63.1506(b), labeling is required for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln.

Since the sweat furnaces are no longer Group 1 furnaces, the sweat furnaces are no longer considered applicable units under 63.1506(b). Therefore, it is determined that the labeling requirements of 63.1506(b) no longer apply. Thus, Condition D.1.15 shall be removed.

~~D.1.15 Labeling [63.1506(b)(1), (2)]~~
~~The owner or operator shall provide and maintain easily visible labels that shall be posted at sweat furnaces AS-990 and AS-1000. Said labels shall identify the applicable emission limits and means of compliance, including:~~

~~(a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and~~

~~(b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.~~

9. Condition D.1.17:

Condition D.1.17 (now Condition D.1.13) was been amended to:

(a) include the OM&M plan approval date,
(b) add the rule citation associated with the OM&M plan approval date,
(c) include the site specific SAPU requirements of existing Condition D.1.30 in this Condition because the owner or operator is required to include the information of Existing Condition D.1.30 as part of the OM&M plan,
(d) clarify that Parts (a) through (h) are information to be included in the OM&M plan, not requirements,
(e) require the owner or operator to include the operation and maintenance procedures used to meet “all” applicable requirements instead of just the Subpart RRR requirements(the Office of Air Quality can include more stringent requirements if deemed necessary),
(f) include the rule citation allowing the Office of Air Quality the authority to include the more stringent requirements,
(g) clarify that the owner or operator shall calibrate the monitoring devices according to the manufacturer’s specifications “or” every 6 months,
(h) change Part (d)(2) such that the requirements pertain to multiple monitors instead of just one, add more detailed Subpart RRR language to Part (e), and
(i) change Part (f) from “paragraph” (a) to “Part” (a) to be more consistent with the other conditions of the permit, and change the SAPU references where applicable to “furnaces” because each sweat furnace is a SAPU.

In addition, the SAPU requirements of Condition D.1.30 were incorporated into this Condition, with existing Condition D.1.30 being removed.

However, the sweat furnaces are no longer considered SAPUs. Therefore, all references and requirements associated with SAPUs shall be removed.

D.1.1~~7~~**3** Operation, Maintenance, and Monitoring Plan ~~[63.1506(a)(2)]~~ [63.1510(b),~~(s)~~], [326 IAC 2-1.1-11]
The owner or operator shall, for sweat furnaces AS-990 and AS-1000, prepare and implement a written operation, maintenance, and monitoring (OM&M) plan.

Said OM&M plan shall be implemented at startup, but need only be submitted to the Office of Air Quality (OAQ) for review and approval as part of the Part 70 or Part 71 permit application required to be submitted by December 9, 2005. Said OM&M plan shall include, at a minimum, the following information:

(a) for each process and control device, the operating parameters to be monitored to determine compliance, and any applicable established operating levels or ranges;

(b) a monitoring schedule for each sweat furnace;

(c) a list of the procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits of Conditions D.1.5, D.1.6, ~~D.1.7, D.1.8,~~ and D.1.~~9~~**7**;

(d) a list of the procedures for the proper operation and maintenance of the monitoring devices or systems used to determine compliance, including:

(1) the procedures for calibration and certification of accuracy of each monitoring device, at least once every 6 months, or according to the manufacturer's instructions; and
(2) the procedures for the quality control and quality assurance of the required continuous emission monitoring system(s) as required by the general provisions in 40 CFR 63, Subpart A;

(e) a list of the procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used to determine feed/charge (or throughput) weight if a measurement device is not used;

(f) a list of the corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in Part (a) of this Condition, including:

(1) the procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
(2) the procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; **and**

(g) a maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance~~;~~**.** ~~and~~

~~(h) the following additional information for each furnace:~~

~~(1) the identification of each emission unit in the secondary aluminum processing unit,~~
~~(2) the specific control technology or pollution prevention measure to be used for each furnace and the date of its installation or application,~~
~~(3) the SAPU emission limit calculated for each furnace and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit,~~
~~(4) information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operation standards of this Subpart, and~~
~~(5) the monitoring requirements applicable to each furnace and, if applicable, the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedures required in Condition D.1.31(a). If the owner or operator utilizes the performance test alternative specified in Condition D.1.31(b), the owner or operator shall include in the OM&M plan, the agreed upon alternate monitoring procedures.~~

~~These compliance procedures within the operation maintenance and monitoring (OM&M) plan shall not include any averaging among emissions of differing pollutants, the inclusion of any affected units other than emission units in a SAPU, the inclusion of any emission unit while it is shut down, or the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.~~

All subsequent proposed changes to the plan shall be submitted to the Office of Air Quality (OAQ) for review and approval, and shall include, at a minimum, the most recent updated information requested in (a) through (~~h~~**g**) of this condition. Pending approval by the OAQ of an initial or amended plan, the owner or operator shall comply with the provisions of the most recent existing approved plan.

~~The OM&M plan approval date shall be the date the initial performance tests for the SAPUs are completed.~~

10. Condition D.1.18:

Condition D.1.18 (now Condition D.1.14) has been added to include the SSM plan requirements in the Emission Limits and Standards Section, instead of the reporting requirements of existing Condition D.1.38.

The reporting section for Subpart RRR (63.1516(a)) requires the owner or operator to develop and implement a SSM plan, and keep records and submit reports if there are any startups, shutdowns, or malfunctions that are not consistent with the SSM plan.

While 63.1516(a) does have reporting requirements which is appropriate for the reporting requirements of Condition D.1.38, 63.1516(a) also has a requirement to develop and implement a SSM plan. The requirement to have a SSM plan is a standard which should be included in the Emission Limits and Standards Section. Thus, the appropriate SSM plan requirements have been included in the Emission Limits and Standards Section as new Condition D.1.18.

D.1.1~~8~~4 Startup, Shutdown, and Malfunction (SSM) Plan [63.1516(a)]

The owner or operator shall develop and implement a written Startup, Shutdown, and Malfunction plan as described in Sec. 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard.

In addition to the information required in 63.6(e)(3), the plan shall include:

(a) procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

(b) corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

The SSM plan shall be included as part of the OM&M plan required in Condition D.1.1~~7~~3.

11. Condition D.1.21:

Condition D.1.21 (now Condition D.1.17) has been changed as follows to include the more specific rule citation associated with the capture/collection systems.

D.1.~~2~~1**7** Capture/Collection Systems [63.1506(c)**(3)**]
The owner or operator shall operate the capture/control systems at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

12. Condition D.1.22:

Condition D.1.22 (now Condition D.1.18) was changed to include the OM&M plan rule citations.

However, this condition includes a reference to feed/charge monitoring devices required under 63.1506(d)(2). Since the feed/charge monitoring devices are no longer required, it is determined that this reference is no longer necessary. Therefore, the 63.1506(d)(2) reference shall be removed.

D.1.~~22~~**18** Monitoring Devices **~~[63.1506(d)(2)]~~, [63.1510(g)]**
The owner or operator shall operate the monitoring devices at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

13. Condition D.1.23:

Condition D.1.23 (now Condition D.1.19) has been changed as follows to state that compliance shall be "determined" instead of "demonstrate" because the term "determine" is the more appropriate term.

D.1.~~23~~**19** PM/PM10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
During the period between 60 and 180 days after issuance of this permit, in order to **determine** ~~demonstrate~~ compliance with Conditions C.1, D.1.5, and D.1.6, the owner or operator shall perform PM and PM-10 testing utilizing methods as approved by the Office of Air Quality. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

14. Condition D.1.24:

Condition D.1.24 was changed to include the rule citation for Section 63.1511 and include the specific testing requirements of 63.1511.

However, since the sweat furnaces are no longer considered Group 1 furnaces or SAPUs, performance testing is no longer required.

Therefore, Condition D.1.24 shall be removed.

~~D.1.24 Dioxin/Furan Testing Requirements [63.1511], [63.1512]~~
~~The owner or operator shall perform dioxin/furan testing for sweat furnaces AS-990 and AS-1000 as follows, to determine compliance with the dioxin/furan emission limits of Condition D.1.8.~~

~~(a) Site Specific Test Plan:~~

~~Prior to conducting a performance test required by Subpart RRR, the owner or operator shall prepare and submit a site-specific test plan meeting the requirements of 63.7(c).~~

~~(b) Initial Performance Test:~~

~~Following approval of the site-specific test plan, the owner or operator shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit.~~

~~(1) The owner or operator shall conduct each performance test according to the requirements of the general provisions in Subparts A and RRR.~~
~~(2) The owner or operator shall conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.~~
~~(3) Each performance test for a continuous process shall consist of three (3) separate runs, with the pollutant sampling for each run being conducted for the time period specified in the applicable method or in the absence of a specific time period in the test method, for a minimum of 3 hours.~~
~~(4) Each performance test for a batch process shall consists of three (3) separate runs, with pollutant sampling for each run being conducted over the entire process operating cycle.~~
~~(5) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run shall be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.~~
~~(6) The owner or operator shall also during the performance test, measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight.~~

~~An owner or operator that chooses to demonstrate compliance on the basis of the aluminum production weight shall measure the weight of the aluminum produced by the emission unit or affected source instead of the feed/charge weight.~~

(7) Initial compliance with an applicable emission limit or standard shall be considered demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) Test Methods:

The owner or operator shall use the following methods in 40 CFR 60, Appendix A, to determine compliance with the applicable emission limits or standards:

(1) Method 1 for sample and velocity traverses.
(2) Method 2 for velocity and volumetric flow rate.
(3) Method 3 for gas analysis.
(4) Method 4 for moisture content of the stack gas.
(5) Method 5 for the concentration of PM.
(6) Method 9 for visible emission observations.
(7) Method 23 for the concentration of dioxins/furans.
(8) Method 25A for the concentration of THC, as propane.
(9) Method 26A for the concentration of HCl.

(d) Alternative Test Methods:

The owner or operator may use alternative test methods, provided the alternative test method(s) is/are approved by the Administrator.

(e) Repeat Tests:

The owner or operator shall repeat the required performance tests at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the applicable requirements of this Condition and Section C-Performance Testing. Should any testing requirement(s) of this condition conflict with any testing requirement(s) found in Section C-Performance Testing, the owner or operator shall comply with the more stringent applicable requirement(s).

(f) Testing of Representative Emission Units:

With the approval of the Office of Air Quality, a single representative or similar group 1 furnace or in-line fluxer which is not controlled by an add-on control device may be tested to determine the emission rate of all like affected sources at a facility provided that:

(1) the tested emission unit must use identical feed/charge and flux materials in the same proportions as the emission units it represents,
(2) the tested emission unit is subject to the same work practices and the emission units that it represents,
(3) the test emission unit is of the same design as the emission units that it represents,
(4) the tested emission unit is tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents,
(5) at least one of each different style of emission unit at the facility is tested, and
(6) all add-on control devices are tested.

~~(g) Establishment of Monitoring and Operating Parameter Values:~~

~~The owner or operator shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter that ensures compliance with each applicable emission limit or standard.~~

~~To establish the minimum or maximum value or range, the owner or operator shall use the appropriate procedures in this Condition.~~

~~The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Commissioner:~~

~~(1) the complete emission test reports(s) used as the basis of the parameter(s) is submitted,~~
~~(2) the same test methods and procedures as required by Subpart RRR were used in the test,~~
~~(3) the owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report, and~~
~~(4) all process and control equipment operating parameters required to be monitored were monitored as required in Subpart RRR and documented in the test report.~~

15. Condition D.1.25:

Condition D.1.25 was changed to clarify that the daily emissions need only be determined if the owner or operator decides not to use performance test data, to use language more consistent with the Subpart RRR requirements, and to specify that the requirements pertain to the furnaces.

However, since the sweat furnaces are no longer considered SAPUs, it is determined that the SAPU requirements no longer apply.

Therefore, Condition D.1.25 shall be removed.

~~D.1.25 Feed/Charge (or Aluminum Production Weight) Requirements [63.1512(k)]~~
~~During the performance tests required in Condition D.1.23, the owner or operator shall, for sweat furnaces AS-990 and AS-1000, measure (or otherwise determine) and record the total weight of feed/charge (or aluminum production weight), for each of the three required test runs, and calculate and record the total weight.~~

~~(a) Calculate the total weight of material charged to each sweat furnace for each 24-hour day of operation using the feed/charge or aluminum production weight information required in Condition D.1.14.~~

~~If the owner or operator chooses to comply on the basis of weight of aluminum produced by each furnace instead of the weight of material charged to the emission unit, all performance test emissions results and all calculations shall be conducted on the aluminum production weight basis.~~

~~(b) Multiply the total feed/charge weight or the weight of aluminum produced by each furnace, which ever is applicable, for the 24-hour period (as determined during the most recent performance test) to provide the dioxin/furan emissions for each emission unit for the 24-hour period, in pounds.~~

~~(c) Divide the total emissions for each furnace for the 24-hour period by the total material charged to the furnace, or the weight of aluminum produced by the furnace over the 24-hour period to provide the daily emission rate for the furnace.~~

~~(d) Compute the 24-hour daily emission rate using the following equation:~~

$$E_{day} = \frac{Sum [T_i * ER_i]}{Sum [T_i]}$$

~~where: E_{day} = the daily dioxin/furan emission rate for the sweat furnace for the 24-hour period.~~
~~T_i = the total amount of feed, or aluminum produced, for the sweat furnace for the 24-hour period (tons).~~
~~ER_i = the measured emission rate for the sweat furnace as determined in the performance test (lb/ton).~~

~~(e) Calculate and record the 3-day, 24-hour rolling average dioxin/furan emissions by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.~~

~~(f) Convert the 3-day, 24-hour rolling average dioxin/furan emissions calculated in Part (e) of this Condition to TEQ units. To convert the 3-day, 24-hour rolling average dioxin/furan emissions to TEQ units, the owner or operator shall use the procedures and equation in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB-145756.~~

16. Condition D.1.26:

Condition D.1.26 (now Condition D.1.20) was changed to clarify that the equations listed in this condition shall be used as applicable.

Part (a) lists the equation which can be used to convert gr/dscf to lb/ton. Since there are no longer any lb/ton limits, it is determined that this equation is not necessary. Therefore, the equation listed in Part (a) shall be removed.

Part (b) lists the equation which can be used to determine the mass weighted dioxin furan emissions for a SAPU. Since the sweat furnaces are no longer considered SAPUs, it is determined that this equation is not necessary. Therefore, the equation listed in Part (b) shall be removed.

D.1.2~~5~~**60 Additional** Equation~~s~~ for Determining Compliance [63.1513~~(b),~~(d)~~, and (e)~~]

T**he owner or operator shall, ~~as applicable~~, use the following equation~~s~~ to determine** ~~demonstrate~~ compliance with the limit~~s~~ of Condition~~s~~ D.1.7~~, D.1.8, and D.1.9, the owner or operator shall use the following~~:

~~(a) for conversion of gr/dscf to lb/ton:~~

$$E = \frac{C * Q}{P * 7000}$$

~~where: E = dioxin/furan emission rate (lb/ton feed or aluminum produced)~~
~~C = dioxin/furan concentration (gr/dscf)~~
~~Q = volumetric flow rate of exhaust gases (dscf/hr)~~
~~P = production rate (ton/hr)~~

~~(c~~**b**~~)~~ ~~to determine compliance with the SAPU limit of Condition D.1.9, the owner or operator shall either~~ **~~to determine the aluminum mass weighted dioxin/furan emissions for a SAPU unit~~**~~:~~

~~(1) the owner or operator shall compute the mass weighted dioxin/furan emissions for the SAPU using the following equation:~~

$$E_{cD/F} = \frac{\text{sum } [E_{tiD/F} * T_{ti}]}{\text{sum } [T_{ti}]}$$

~~where: $E_{cD/F}$ = the mass weighted dioxin/furan emissions for the SAPU~~
~~$E_{tiD/F}$ = measured dioxin/furan emissions~~ **~~for the individual unit~~**
~~T_{ti} = the average feed rate for the individual emission unit during the operating cycle or performance test period~~

~~Compliance with the SAPU limit of Condition D.1.9 shall be considered achieved if the estimated mass weighted dioxin/furan emissions for the SAPU is less than or equal to the SAPU limit of Condition D.1.9.~~

~~or~~

~~(2) as an alternative to using equation of part (c)(1) of this Condition, the owner or operator may demonstrate compliance for the SAPU by demonstrating that sweat furnace AS-990 and AS-1000 is in compliance with the individual group 1 emission limits of Condition D.1.8.~~

~~(c)~~ For conversion of gr/dscf or lb/ton to gr TEQ/dscf or lb TEQ/ton, respectively, the owner or operator shall use the procedures and equation in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB-145756.

17. Condition D.1.27:

Condition D.1.27 (now Condition D.1.21) has been changed as follows to provide more detailed information required in Subpart RRR.

D.1.2~~8~~**7**~~1~~ Performance Evaluation [63.1512(m)]**,** [326 IAC 2-8-5(a)(1), (4)]
Prior to the initial performance test, the owner or operator shall**:**

(a) conduct a performance evaluation ~~of~~**for** each temperature monitoring device **according to the requirements of 63.8; and**

(b) use the following procedures to establish an operating parameter value or range for the required afterburner **operating** temperature**:** ~~of 1600 °F~~.

(1) continuously measure and record the operating temperature of each afterburner every fifteen (15) minutes during the THC and D/F performance tests,
(2) determine and record the fifteen (15) minute block average temperatures for the three test runs, and
(3) determine and record the 3-hour block average temperature measurements for the 3 test runs;

~~Said performance evaluations shall be conducted according to the requirements of 40 CFR 63, Section 63.8, and Section C- Performance Testing,~~

~~and shall be performed after issuance of this permit, with the test results submitted as part of the Notification of Compliance Status Report within 60 days, as specified in Condition D.1.36(b). The tests shall be conducted utilizing the specified methods of Subpart RRR and/or alternative methods as approved by the Office of Air Quality.~~

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

18. Condition D.1.29:

Condition D.1.29 (now Condition D.1.23) has been changed as follows to reflect the specific rule citation associated with the capture/collection system and eliminate the Notification of Compliance Status requirements because the same requirements are already in the Notification of Compliance requirements.

D.1.~~30~~**29****3** Capture/Collection System [63.1510(d)**(2)**] ~~[63.1512(s)]~~
The owner or operator shall, for sweat furnaces AS-990 and AS-1000, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Condition**s D.1.1~~2~~0 and** D.1. ~~2~~1**7,** and record the results of each inspection.

~~In addition, to document compliance with the requirements of this Condition, the owner or operator shall, for sweat furnaces AS-990 and AS-1000, submit the information described in Condition D.1.36(b)(5) as part of the notification of compliance status report.~~

19. Condition D.1.30:

Condition D.1.30 (now Condition D.1.24) has been changed as follows to include additional information listed in Subpart RRR, eliminate the recorder response range requirement because it is not a monitoring requirement (it is now located in D.1.13), and change Part (b) so as to be a monitoring requirement and not be redundant with the requirements of Condition D.1.13(a).

D.1.3~~1~~**024** Monitoring Devices [63.1510(g)]
The owner or operator shall:

(a) continuously monitor and record the operating afterburner temperature of each respective afterburner **in 15 minute block averages and determine and record the average temperature for each 3 hour block period;** ~~The recorder response range shall include zero and 1.5 times the required 1600 °F temperature, and the reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Office of Air Quality~~; and

(b) ~~inspect the monitoring devices, once every 6 months,~~ **calibrate**~~ing~~ each afterburner monitoring device, as necessary, according to the manufacturer's specifications **referenced in Condition D.1.13~~1~~(a)**.

20. Condition D.1.31:

Condition D.1.31 was amended to clarify that Condition D.1.31 is a monitoring requirement and to remove some unnecessary language.

However, since the sweat furnaces are no longer considered SAPUs, it is determined that the requirements of Condition D.1.31 are no longer necessary.

Therefore, Condition D.1.31 shall be removed.

~~D.1.31 Secondary Aluminum Processing Unit (SAPU) Monitoring Requirements [63.1510(t) and (u)]~~
~~To demonstrate compliance with the SAPU limits of Condition D.1.9, the owner or operator shall for each furnace, either:~~

~~(a) record the 3-day, 24-hour rolling average dioxin/furan emissions calculated in Condition D.1.25;~~

~~or~~

~~(b) keep readily available results of the most recent acceptable compliance stack tests (as required in Condition D.1.24) that demonstrate that sweat furnace AS-990 and sweat furnace AS-1000, each, are in compliance with the individual dioxin/furan emission limits of Condition D.1.8.~~

21. Condition D.1.32:

Condition D.1.32 was changed to remove the Notification of Compliance Status requirements because the same requirements are included in the Notification of Compliance Status requirements, remove its associated rule citation, and require the owner or operator to correct any problems with the labels that are detected during the required inspections.

However, since the sweat furnaces are no longer considered SAPUs, it is determined that the requirements of Condition D.1.32 are no longer necessary.

Therefore, Condition D,1.32 shall be removed.

~~D.1.32 Labeling [63.1510(c)]~~
~~The owner or operator shall, for sweat furnaces AS-990 and AS-1000, inspect the labels required in Condition D.1.15 at least once per calendar month to confirm that the posted labels include the required information, and are intact and legible. The owner or operator shall, upon completion of each inspection, record the results.~~

~~Should the owner or operator during an inspection of the labels, determine that any label is lacking the required information, or is not intact and legible, the owner or operator shall replace said label(s) with corrected or updated versions.~~

22. Condition D.1.34:

Condition D.1.34 (now D.1.26) has been changed as follows to include additional language required in Subpart RRR.

D.1.3~~54~~**26** Alternate Monitoring Methods [63.1510(w)]

(a) The owner or operator may, for sweat furnaces AS-990 and AS-1000, submit to the United States (U.S.) Environmental Protection Agency (EPA), Region V, an application for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart RRR, provided the owner or operator:

(1) continues to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure,
(2) submits an application for approval of alternate monitoring methods **no later than the notification of the performance test,** with said application containing:

(A) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach,
(B) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated, and
(C) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s), and

(3) submits all required supporting information in a timely manner to the U.S. EPA, Region V, to allow sufficient consideration of the application. Neither submittal of an application nor the U.S. EPA, Region V's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of Subpart RRR.

(b) Upon receipt of the alternative monitoring plan application, the U.S. EPA, Region V, shall review the alternate monitoring application as follows:

(1) No averaging periods other than those specified in Section 63.1510 shall be approved.
(2) The alternate monitoring application shall only be approved if it is determined that the alternate monitoring plan provides equivalent or better assurance of compliance with the relevant emission standard(s).
(3) Before disapproving any alternate monitoring application, the U.S. EPA, Region V, shall provide notice of:

(A) the information and findings upon which the intended disapproval is based, and
(B) an opportunity for the owner or operator to present additional supporting information before final action is taken on the application. Said notice shall specify how much additional time is allowed for the owner or operator to provide additional supporting information.

The U.S. EPA, Region V, reserves the authority to, at any time on a case-by-case basis, require additional or alternative operating limits, or alternative approaches to establishing operating limits, as deemed necessary to ensure that compliance with the emission standards of this subpart is demonstrated.

23. Condition D.1.35:

Condition D.1.35 (now Condition D.1.27) was amended to include additional language required in Subpart RRR and include the associated 63.1512 notification rule citations.

Included in Condition D.1.35 (now Condition D.1.27) is a reference to 63.1512(r). 63.1512(r) lists the labeling requirements that need to be included in the notification of compliance status report. These requirements are referenced and listed in the Condition Since the labeling requirements no longer apply, it is determined that the reference and requirements are not necessary. Therefore, the labeling reference and requirements shall be removed.

Condition D.1.35 (now Condition D.1.27) also contains notification requirements pertaining to testing. Since performance is no longer required, it is determined that the test notification requirements are not necessary. Therefore, the test notification requirements shall be removed.

D.1.3~~6~~**527** Notifications [63.1515]**, [63.1512~~(r),~~(s)]**
The owner or operator shall submit the following notifications:

(a) Initial Notifications:

The owner or operator shall submit initial notifications to the Office of Air Quality as follows:

(1) As required by 63.9(b)(1), the owner or operator shall notify the Office of Air Quality of any existing minor source that is modified such that it becomes a major source subject to Subpart RRR.
(2) As required by 63.9(b)(3), the owner or operator shall notify the Office of Air Quality of any new minor affected source, reconstructed affected source, or source that has been reconstructed such that it becomes an affected source for which an application for approval of construction or reconstruction is not required under 63.5(d), must provide notification include a statement that the source is subject to any standard under Subpart RRR.
(3) As required by 63.9(b)(4), the owner or operator shall, for any new major affected source or reconstructed major affected source for which an application for approval of construction or reconstruction is required by 63.5(d) must, provide the following notifications:

(A) notification of intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source,
(B) notification of the date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction was commenced before the effective date of Subpart RRR, or no later than 30 days after the date construction or reconstruction commenced),
(C) notification of the anticipated date of startup, and
(D) notification of the actual date of startup.

(4) As required by 63.9(b)(5), any owner or operator who intends to construct a new affected source or reconstruct an affected source subject to Subpart RRR, or reconstruct a source such that it becomes an affected source subject to Subpart RRR, shall provide notification of the intended construction or reconstruction. Said notification shall include all the information required for an application for approval of construction or reconstruction, as required by 63.5(d).

For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

Said application shall be submitted as follows:

(A) the application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence, but no sooner than the effective date of Subpart RRR if the construction or reconstruction commences after the effective date of Subpart RRR, or
(B) the application shall be submitted as soon as practicable before startup but no later than 90 days after the effective date of Subpart RRR if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

(5) As required by 63.9(d), the owner or operator shall provide notification of any special compliance obligations for a new source.
(6) As required by 63.9(e) and (f), the owner or operator shall, if required, provide notification to the Office of Air Quality, of the anticipated date for conducting performance tests and visible emission observations. Notification of the intent to conduct a performance test shall be submitted at least 60 days before the performance test is scheduled. Notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
(7) As required by 63.9(g), the owner or operator shall provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) Notification of Compliance Status Report:

The owner or operator shall submit a notification of compliance status report to the Office of Air Quality and US EPA, Region V within 60 days of startup. Said notification of compliance status report shall include the information specified in this Condition, and shall be signed by the responsible official who shall certify its accuracy.

The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination.

For the notification of compliance status report to be deemed complete, the owner or operator shall submit the following information:

(1) ~~all information required in Sec. 63.9(h). The owner or operator shall provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emissions and opacity tests).~~

~~(2)~~ the approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

~~(3) unit labeling information required in Condition D.1.15.~~

(~~4~~**2**) the compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(~~5~~**3**) design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in Conditions D.1.1~~2~~**0** and D.1.~~2~~1**7**.

(~~6~~**4**) manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 °F for the afterburners of sweat furnaces AS-990 and AS-1000.

(~~7~~**5**) approved OM&M plan.

(~~8~~**6**) startup, shutdown, and malfunction plan, with revisions.

If the information specified in (b)(1) through (b)(~~8~~**6**) above is submitted at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted.

24. Condition D.1.36:

Condition D.1.36 (now Condition D.1.28) was amended to remove unnecessary language and include additional language required in Subpart RRR.

Part (b)(3) of Condition D.1.36 requires the owner or operator to keep records of the feed/charge weights. However, since the feed/charge weights are no longer required to be monitored, it is determined that these record keeping requirements are unnecessary. Therefore, Part (b)(3) shall be removed.

Part (b)(4) of Condition D.1.36 requires the owner or operator to keep and maintain records of the label inspections. However, since labels are no longer required, it is determined that records of the label inspections are unnecessary. Therefore, Part (b)(4) shall be removed.

Parts (b)(7)(c) and (b)(8) of Condition D.1.36 to keep and maintain SAPU records of the SAPU emission plan and SAPU feed/charge weight, respectively. However, since the sweat furnaces are no longer considered SAPUs, these records are determined to be unnecessary. Therefore, Parts (b)(7)(c) and (b)(8) shall be removed.

D.1.~~36~~**28** Record Keeping for 40 CFR 63, Subpart RRR [63.1517]

The owner or operator shall keep records as follows:

(a) As required by Sec. 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.

(1) The owner or operator shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records shall be retained at the facility. The remaining 3 years of records may be retained off site,

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche, and
(3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

(b) In addition to the general records required by Sec. 63.10(b), the owner or operator shall maintain records of:

(1) For sweat furnace AS-990 and AS-1000 afterburners:

(A) Records of the 15-minute block average afterburner operating temperature recorded in Condition D.1.~~30~~**24**(a), including any period when the temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken, and
(B) Records of results of the annual afterburner inspections required in Condition D.1.2~~8~~**2**.

(2) For each continuous monitoring system, records required by Sec. 63.10(c).
~~(3) Records of all feed/charge (or throughput) weights of sweat furnaces AS-990 and AS-1000, for each operating cycle or time period used in the performance test.~~
~~(4) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.~~
(~~5~~**3**) Records of annual inspections of emission capture/collection and closed vent systems.
(~~6~~**4**) Records for any approved alternative monitoring or test procedure.
(~~7~~**5**) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(A) Startup, shutdown, and malfunction plan as specified in 63.10(b), **and**
(B) For major sources, **the** OM&M plan**.** ~~, and~~
~~(C) Site-specific secondary aluminum processing unit emission plan (if applicable).~~

~~(8) For the secondary aluminum processing unit (sweat furnaces AS-990 and AS-1000), records of the total feed/charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, the total aluminum produced for each 24-hour period and, if applicable, calculations of the 3-day 24-hour rolling average emissions.~~

25. Condition D.1.37:

Condition D.1.37 (now Condition D.1.29) has been changed as follows to include sweat furnace AS-1000 and to ensure that there are no conflicts between the federal and state general record keeping requirements.

D.1.~~38~~**29** Particulate Matter (PM) and PM10 Record Keeping Requirements

(a) To document compliance with Condition D.1.~~33~~**25**, the owner or operator shall maintain records of daily visible emission notations of the AS-990 **and AS-1000** stack exhaust.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

26. Condition D.1.38:

Condition D.1.38 (now Condition D.1.30) was amended to remove the SSM requirements that were put in the OM&M plan requirements, and remove the requirements of Part (a)(2) because they don't apply.

Part (a)(1)(D) requires the owner or operator to include in the excess emissions report, all deviations from the 3-day, 24-hour rolling average emission limit for a SAPU. Since the sweat furnaces are no longer considered SAPUs, it is determined that these reporting requirements are not necessary. Therefore, Part (a)(1)(D) shall be removed.

Part (a)(2) requires the owner or operator to submit the results of any performance test coducted during the reporting period. Since performance tests are no longer required, it is determined that these reporting requirements are no longer necessary. Therefore, Part (a)(2) shall be removed.

D.1.3~~8~~**0** Reporting Requirements for 40 CFR 63, Subpart RRR [63.1516**(b)**]
The owner or operator shall submit the following reports:

(a) Excess Emissions/Summary Report:

As required by Sec. 63.10(e)(3), the owner or operator shall submit semiannual reports within 60 days after the end of each 6-month period. Each report shall contain the information specified in Sec. 63.10(c). When no deviations of parameters have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period.

~~(1)~~ A report shall be submitted if any of these conditions occur during a 6-month reporting period:

(~~A~~**1**) an excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter),

(~~B~~**2**) an action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in Sec. 63.6(e)(3)~~,~~ **and**

(~~C~~**3**) any period of time when sweat furnace AS-990 or AS-1000 was not operated according to the requirements of 40 CFR 63, Subpart RRR**.**

~~(D) as applicable, a deviation from the 3-day, 24-hour rolling average emission limit for a SAPU.~~

~~(2) The owner or operator shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.~~

(b) Annual Compliance Certifications:

For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator shall certify continuing compliance based upon, but not limited to, the following conditions:

(1) Any period of excess emissions, as defined in (a) of this Condition, that occurred during the year were reported as required by Subpart RRR, and
(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

27. Condition Numbers:

All conditions have been renumbered accordingly

28. Condition Rule References:

All rule references have been condensed to reflect the respective Subpart RRR Sections.

29. Table of Contents:

The Table of Contents has been amended to reflect the Condition renumbering.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Heartland Aluminum
Source Location:	706 East Ninth Street, Warren, Indiana 46792
County:	Huntington
SIC Code:	5093
Operation Permit No.:	F 069-16225-00060
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application from Heartland Aluminum relating to the construction and operation of an additional aluminum sweat furnace to their existing secondary metals reclamation operation.

History:

On June 9, 1999, Heartland Aluminum was issued a Minor Source Operating Permit (069-10650-00060) for a secondary metals reclamation operation. The emission unit associated with the proposed source is one aluminum sweat furnace (AS-1000) with a maximum design throughput of 0.5 tons per hour. The unrestricted potential to emit of the worst case Part 70 criteria pollutant (PM10) is determined to be 28.58 tons per year. The hazardous air pollutant emissions are determined to be negligible.

On April 16, 2001, Heartland Aluminum submitted an application to construct and operate an additional aluminum sweat furnace, identified as AS-990, with a maximum design throughput of 1.25 tons per hour. The worst case Part 70 criteria pollutant emissions (PM10) are estimated to be 71.45 tons per year with the hazardous air pollutant emissions determined to be negligible.

After application of the proposed sweat furnace, the source unrestricted potential to emit is determined to be 100.03 tons per year which exceeds the Part 70 applicable threshold of 100 tons per year.

Therefore, the source has the option of obtaining either a Part 70 (title V) permit under 326 IAC 2-7 or a Federally Enforceable State Operating Permit (FESOP) under 326 IAC 2-8.

On March 23, 2000, the U. S. Environmental Protection Agency (U.S. EPA) issued a National Emission Standard for Hazardous Air Pollutants (NESHAP)(326 IAC 20 and 40 CFR Part 63, Subpart RRR) for the secondary aluminum production source category. The existing and proposed sweat furnaces are subject to the requirements of this rule.

Subpart RRR requires sources that are subject to the requirements of this rule to obtain a Part 70 major source permit. This rule also allows the Office of Air Quality the power to defer the requirement to submit a Title V permit application until December 9, 2005, provided the affected units are not located at a major source under 40 CFR 63.2 (single and combined HAP emissions greater than 10 and 25 tons/yr, respectively) and the source is not otherwise required to obtain a Title V permit.

The source HAP emissions (negligible) are less than the 40 CFR 63.2 levels. The source PM10 emissions, however, exceed the Part 70 applicable level of 100 tons/yr. Thus, the source cannot be deferred from the Title V requirements unless the source PM10 emissions are reduced to less than the Part 70 level of 100 tons/yr. This limitation can be obtained through a Federally Enforceable State Operating Permit (FESOP) under 326 IAC 2-8.

Thus, Heartland Aluminum has opted to use emission controls (afterburners at sweat furnaces AS-990 and AS-1000) via a FESOP to reduce the PM10 emissions instead of obtaining a Part 70 Permit.

Issuing the source a FESOP provides the means by which both criteria for deferment of the requirement to submit a Title V application under 40 CFR 63, Subpart RRR are satisfied.

Thus, Heartland Aluminum shall not be required to submit a Part 70 application until December 9, 2005.

Existing Approvals

This source has been operating under FESOP (069-14274-00060), issued on August 21, 2001.

A Minor Permit Revision (069-16043) was issued on June 18, 2002.

The source has moved to a new address and is being issued another FESOP.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temp. (^{0}F)
EP-01	Sweat Furnace	28	2	1803	1500
EP-02	Sweat Furnace	28	2	3980	1600

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Federally Enforceable State Operating Permit (FESOP) be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant.

An administratively complete application for the purposes of this review was received on July 18, 2002.

Emission Calculations

UNRESTRICTED POTENTIAL TO EMIT (PTE):

Heartland Aluminum has two sweat furnaces.

The emissions generated by this aluminum reclamation operation are all criteria pollutants due to metal melting and recovery, and all criteria pollutants and various hazardous air pollutants (HAP) due to natural gas combustion.

The following calculations determine the unrestricted potential to emit.

Metal Melting and Recovery Emissions:

The following calculations determine the metal melting and recovery emissions based on maximum design throughputs of 0.70 and 1.25 tons/hr, emission factors from EPA AP-42, Chapter 12.8, emissions before controls, and 8760 hours of operation.

Tons/hr * Ef (lb/ton) * 8760 hr/yr * 1/2000 ton/lb = tons Pollutant/yr

	PM 14.5 lb/ton	PM10 13.05 lb/ton	SO2 3.5 lb/ton	NOx 0.60 lb/ton	VOC 0.20 lb/ton	CO neg. lb/ton
Sweat Furnace 990	79.39	71.45	19.16	3.29	1.10	-
Sweat Furnace 1000	44.46	39.98	10.77	1.81	0.64	-
Total	**123.85**	**111.43**	**29.93**	**5.10**	**1.74**	**-**

Natural Gas Combustion Emissions:

The following calculations determine the natural gas combustion emissions from the primary and after burners based on a combined maximum capacities of 6.00 and 3.40 MMBtu/hr, EPA AP-42 emission factors, Chapter 1.4, emissions before controls, and 8760 hours of operation.

MMBtu/hr * 1 E6 Btu/MMBtu * 1/1000 cf/Btu * 1/1E6 MMcf/cf * Ef lb poll/MMcf = lb/hr
lb/hr * 8760 hr/yr * 1/2000 ton poll/lb poll = ton poll/yr

Ef (lb/MMcf)	PM 7.60	PM10 7.60	SO2 0.60	NOx 94.00	VOC 5.50	CO 40.00	Comb. HAP (various)
Combustion	0.20	0.20	0.02	2.47	0.14	1.05	neg.
Combustion	0.11	0.11	0.01	1.40	0.08	0.60	neg.
Total	**0.31**	**0.31**	**0.03**	**3.87**	**0.22**	**1.65**	**neg.**

Total Unrestricted Potential to Emit:

The total unrestricted potential to emit is the sum of the furnace and combustion emissions. The following table is a summary of these emissions.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	123.85	111.43	29.93	5.10	1.74	-	neg.
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions Before Controls	**124.16**	**111.74**	**29.96**	**8.97**	**1.96**	**1.65**	**neg.**

POTENTIAL EMISSIONS AFTER CONTROLS:

The PM, PM10, and VOC emissions from the sweat furnaces are controlled by an afterburner with a design control efficiency of 97%.

The following calculations determine the PM, PM10, and VOC emissions after controls based on the a control efficiency of 97% and the estimated PM/PM10 emissions before controls.

PM: 123.85 tons/yr * (1 - 0.97) = 3.72 tons PM/yr
PM10: 111.43 tons/yr * (1 - 0.97) = 3.34 tons PM10/yr
VOC: 1.74 tons/yr * (1 - 0.97) = 0.05 tons VOC/yr

All other emissions are uncontrolled. The following is a summary of the emissions after controls.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	3.72	3.34	29.93	5.10	0.05	-	-
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions After Controls	**4.03**	**3.65**	**29.96**	**8.97**	**0.27**	**1.65**	**neg.**

Potential To Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	124.16
PM10	111.74
SO_2	29.96
VOC	1.96
CO	1.65
NO_x	8.97

	Worst Case Single HAP	Combined HAPs
tons/yr	neg.	neg.

However, the source can, through 40 CFR 63, Subpart RRR, defer submittal of a Title V permit application until December 9, 2005 by obtaining a FESOP which allows the use of emission controls to reduce the PM10 emissions to below the Part 70 applicable threshold. Therefore, the source shall be granted a FESOP under 326 IAC 2-8.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	attainment/unclassifiable
SO_2	attainment/unclassifiable
NO_2	attainment/unclassifiable
Ozone	attainment/unclassifiable
CO	attainment/unclassifiable
Lead	attainment/unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Huntington County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD and Part 70 Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	3.72	3.34	29.93	5.10	0.05	-	-
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions After Controls	**4.03**	**3.65**	**29.96**	**8.97**	**0.27**	**1.65**	**neg.**

Part 70 Thresholds (tons/yr)	N/A	100	100	100	100	100	25
PSD Major Source Levels	250	250	250	250	250	250	N/A

(a) This new source is not a major PSD stationary source because no regulated attainment criteria pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

(c) This existing source is not at this time a major Part 70 source because the PM10 PTE is limited to less than 100 tons/yr through a FESOP.

However, if no changes are made to the source that increase emissions to the levels that establish the source as a major Part 70 source, the source will be defined a major Part 70 source on December 9, 2005, pursuant to 40 CFR 63, Subpart RRR.

Federal Rule Applicability

New Source Performance Standards (NSPS):

40 CFR 60, Subpart S, Standards of Performance for Primary Aluminum Reduction Plants:

The proposed modification is not subject to the requirements of 40 CFR 60, Subpart S, "Standards of Performance for Primary Aluminum Reduction Plants", because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191.

National Emission Standard for Hazardous Air Pollutants (NESHAP):

The two aluminum sweat furnaces are subject to 40 CFR 63, Subpart RRR because the existing and proposed furnaces are affected area sources as defined in 63.1500(c)(3), and the furnaces are not any of the exemptions under Section 63.1500(d) and (e).

Pursuant to 40 CFR 63, Subpart RRR, Section 63.1501, the owner or operator shall achieve compliance with the requirements of Subpart RRR by the following dates:

(a) aluminum sweat furnace AS-1000: by March 24, 2003.
(b) aluminum sweat furnace AS-990: upon startup.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

The source is not subject to the requirements of 326 IAC 2-6 because the source PTE of volatile organic compounds (VOC), oxides of nitrogen (NOx), PM10, Sulfur dioxide (SO2), and carbon monoxide (CO), each are less than the applicable level of 100 tons/yr as specified in 326 IAC 2-6(b).

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate

326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

New Sweat Furnace (AS-990):

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from metal processing in the aluminum sweat furnace shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons of metal per hour.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour (1.25 tons/hr)

The thermal afterburner of sweat furnace AS-990 shall be in operation at all times the aluminum sweat furnace is in operation, in order to comply with this limit.

Existing Sweat Furnace (AS-1000):

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from metal processing in the aluminum sweat furnace shall not exceed 3.23 pounds per hour when operating at a process weight rate of 0.70 tons of metal per hour.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour (0.70 tons/hr)

The thermal afterburner of sweat furnace AS-1000 shall be in operation at all times the aluminum sweat furnace is in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. No facility at this source is regulated under any other provision of Article 8, nor does the proposed modification consist of any facility with a PTE VOC at 25 tons per year or more.

Thus, 326 IAC 8-1-6 does not apply.

326 IAC 9-1-2 (Carbon Monoxide Emission Limits)

This rule limits the carbon monoxide emissions from all stationary sources commencing operation after March 21, 1972. This rule includes sources of ferrous smelters and refuse incineration and burning equipment. The proposed aluminum sweat furnace is not a ferrous metal smelter, nor is the facility used for refuse incineration or burning.

Therefore, 326 IAC 9-1-2 does not apply.

326 IAC 11-5-1 (Fluoride Emission Limitations for Existing Primary Aluminum Plants)

Pursuant to 326 IAC 11-5-1 (Applicability), the requirements of this rule apply to primary aluminum plants in operation on or before January 26, 1976. The source is a secondary aluminum processing plant.

Therefore, 326 IAC 11-5-1 does not apply.

Testing Requirements

Pursuant to the construction permit stack testing guidance "Stack Testing Requirements in Construction Permits", issued on January 1, 1999, stack testing is required if:

(a) any unit is subject to a NSPS or NESHAP standard,
(b) any unit is subject to 326 IAC 6-1,
(c) the unrestricted potential emissions of any unit are greater than 40 tons/yr,
(d) the modification consists of any unit which utilizes an emission control device to satisfy a synthetic minor limit,
(e) the modification consists of any units which use unapproved emission factors to estimate the emissions, and
(f) any unit of the proposed modification is not in compliance with the applicable state and federal rules.

The sweat furnaces are subject to 40 CFR 63, Subpart RRR which requires the owner or operator to comply with a dioxin/furan emission limit of 3.5 X 10^{-10} gr/dscf TEQ at eleven percent (11%) oxygen (O_2). However, the NESHAP exempts the source from compliance stack tests provided the source installs afterburners at each furnace, operates each afterburner at 1600 ^{o}F, and achieve a required residence time of 2 seconds for each afterburner.

Heartland aluminum will install afterburners at each sweat furnace. The design residence time will be 2 seconds, and the afterburners will be operated at 1600 ^{o}F. Therefore, no stack tests for dioxin/furan emission shall be required.

The source unrestricted potential to emit of PM10 exceeds 100 tons/yr. In order to avoid Part 70 major source review until December 9, 2005, the source has opted to reduce the PM10 emissions to less than the part 70 levels through use of emission controls (the sweat furnace afterburners). Thus, PM10 stack testing shall be required for sweat furnace AS-990 and AS-1000 afterburners.

The source unrestricted potential to emit of particulate matter (PM) exceed 40 tons/yr. In addition, sweat furnaces AS-990 and AS-1000 are subject to respective 326 IAC 6-3-2 hourly limits of 2.60 and 4.76 lb/hr.

Since the unrestricted PM emissions are less than the only applicable major source threshold of 250 tons/yr, no PM testing is required to establish the annual emission rate. However, since the source unrestricted potential to emit is greater than 40 tons/yr, stack testing for PM shall be required to demonstrate compliance with the respective 326 IAC 6-3-2 limits.

Compliance Monitoring:

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Although the source Title V permit has not been issued, the source is considered subject to the Part 70 requirements under a permit shield. Thus, a determination has to be made as to whether or not compliance monitoring is required of the proposed modification.

State Compliance Monitoring Requirements:

Pursuant to the compliance monitoring guide "Title V Air Permit Compliance Monitoring Facts", issued on May 14, 1996, compliance monitoring is required if the proposed modification consists of units that emit particulate matter (PM), sulfur dioxide (SO2), and/or volatile organic compounds (VOC), and if the modification consists of any unit that:

(a) is subject to a NSPS or NESHAP standard, or
(b) has a control device and the allowable emissions of the controlled pollutant exceeds 10 pounds per hour, or
(c) does not utilize emission controls and has actual emissions exceeding 25 tons/yr, or
(d) would have been subject to an applicable requirement but for conditions limiting its potential to emit.

The PM10 emissions of sweat furnaces AS-990 and AS-1000 are limited to less than the Part 70 thresholds allowing the source to defer submitting a Title V application to December 9, 2005 which is considered accepting a limit such that an applicable requirement becomes not applicable.

Thus, state compliance monitoring shall be required for both sweat furnaces (AS-990 and AS-1000). Compliance monitoring for sweat furnace AS-990 shall consist of performing daily visible emissions.

Federal Compliance Monitoring Requirements:

While 40 CFR 63, Subpart RRR does not have any applicable requirements for any of the state applicable pollutants (PM, SO2, or VOC), the NESHAP does have compliance monitoring requirements associated with the afterburners used to comply with the dioxin/furan limit under Section 63.1505(f) of the rule.

Pursuant to 40 CFR 63, Subpart RRR, there are compliance monitoring requirements for the afterburners, the emissions capture/control systems, the afterburner temperature monitoring devices, and the miscellaneous requirements of placing informative labels at sweat furnaces AS-990

and AS-1000 and utilizing only clean charge and non-reactive fluxes.

The following is a list of the federal compliance monitoring requirements:

(a) Afterburners:	annual inspections of each afterburner.
(b) Capture/Collection Systems:	annual inspections of each capture/collection and closed vent system.
(c) Monitoring Devices:	continuous monitoring and recording of the afterburner temperature and inspection and calibration of each monitoring device every 6 months.
(d) Labeling Requirements:	monthly inspections of the labels.
(e) Charge/Flux Requirements:	recording the materials charged at each sweat furnace.

Conclusion

The operation of the proposed secondary metals reclamation operation shall be subject to the conditions of the attached proposed FESOP (069-16225-00060).